**Reviewer’s report**

**Title:** Does regulation increase the rate at which doctors leave practice? Analysis of routine hospital data in the English NHS following the introduction of medical revalidation

**Version:** 0  **Date:** 21 Aug 2018

**Reviewer:** Ann Griffin

**Reviewer's report:**

This is an interesting and well written paper. I think the topic of revalidation and attrition/early retirement is highly topical, and will be of interest to a wide range of stakeholders both in the UK as well as internationally. I think it's important that research is carried in order to examine the validity of revalidation recommendations as this is indeed a high stakes assessment. However, I have some concerns about the latter aspect of this research which is detailed below.

Background: the background section is a clear and well-written and justifies the subsequent study. There is sufficient context for the reader unfamiliar with the subject to understand the purpose of revalidation and the research undertaken. Page 3, line 15 beginning "from the GMC register…” needs clarification.

Methods section 2.2 "risk of ceasing NHS practice" were well described and logical as was the results section 3.1.

Methods 2.3 "change in clinical performance": I think it's problematic to attribute the FCEs to the first consultant providing hospital care. This in practice is highly unlikely and hence measurements of the 30 day mortality rates by this means is, in my opinion, very unreliable. Patients now admitted under acute medical takes rarely spend more than 24 hours under the first consultant providing care and consultants often rotate responsibilities for looking after inpatients (often on a weekly basis). It is more likely that it is the consultant at the time of discharge, or death that has had the greatest input into care. I think you have picked this point up in the limitations section however; it is my view that this is a major limitation impacting on the results.

I would also contest the hypothesis in this section. The Kruger-Dunning effect would counter this supposition.

I do not feel able to comment on the details of the statistical analysis and have requested a specific review of that.

Discussion: I fully agree that there are unintended consequences to medical revalidation and that it's of great interest to other regulators and other professionals. It would be good to say why you think, especially in the light of your findings, that medical revalidation has strengthened regulation of the profession.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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No

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